UNITED STATES PATENT AND TRADEMARK OFFICE

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09/420,457	10/18/1999	TAKESHI YAMAMOTO	32032	2834

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>09 December 2002</u> .

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-9,11-24 and 26-30</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-9,11-24,26-30</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1.   Claims 1 – 9, 11 – 24, and 26 - 30 are pending.

2.   Claims 1 – 3, 8, 11, 13 – 17, 20 – 24, 26, and 28 – 30 were amended in the amendment

filed December 9, 2002 (Paper No. 5.) Claims 10 and 25 were cancelled in Paper No. 5.

Acknowledgment is also made of the substitute specification filed December 9, 2002 (Paper No.

4.)

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 1 – 9, 11, 16 – 24, and 26 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Basu et al., U.S. Patent No. 6,097,733, in view of Zhang et al., U.S. Patent No.

6,181,711, further in view of Hooper et al., U.S. Patent No. 5,414,455, further in view of Shaw,

U.S. Patent No. 6,356,945.

5.   As to claims 1 and 16, Basu teaches an Internet interface means for establishing an

interface with the Internet (col. 3, lines 32 – 35) and mobile interface means for establishing an

interface with a mobile network (col. 6, lines 8 – 12.) However, Basu does not specifically teach

a protocol processing means for applying a protocol process to information which are processed

by the Internet interface means and the mobile interface means; and an image information edit

processing means for editing image information which is extracted by the protocol processing

means into image information suitable for mobile communication.

6.   Zhang teaches a protocol processing means for applying a protocol process to

information (Fig.4, reference characters 400 – 410; col. 9, lines 60 - 63); and an image

information edit processing means for editing image information which is extracted by the

protocol processing means into image information suitable for mobile communication (col. 10,

lines 31 – 40.)

7.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Zhang with Basu because Zhang's protocol processing

and information edit processing enables the system to reduce the bit error rate of digital video

(Zhang, col. 4, lines 12 – 16.)

8.   The combination of Zhang and Basu fails to teach a storage unit for storing the image

information which is edited by the image information edit processing means and a storage unit

controlling means for controlling to store the image information in the storage unit and to read

the stored image information.

9.   Hooper teaches a storage unit for storing the image information which is edited by the

image information edit processing means (col. 12, lines 23 – 24) and a storage unit controlling

means for controlling to store the image information in the storage unit and to read the stored

image information (col. 12, lines 24 – 25.)

10.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Hooper with the combination of Basu and Zhang because

Hooper's storage unit and storage unit controller enables the system to provide interactive

control of the image information, increasing the system's functionality (Hooper, col. 1, lines 28 –

30.)

11.   The combination of Zhang, Basu, and Hooper fail to teach that the image information edit

processing means edits a display characteristic of image information.

12.   Shaw teaches editing a display characteristic of image information (col. 8, lines 46 – 49.)

13.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Shaw with the combination of Zhang, Basu, and Hooper

because Shaw's editing simplifies the transfer of data from one device to another (Shaw, col. 1,

lines 50 – 52.)

14.   As to claims 2 and 17, Zhang teaches that the image information which is

transmitted/received in respective interfaces of said Internet interface means, said mobile

interface means, said protocol processing means, said image information edit processing means,

and said storage unit controlling means is communicated in a cellulated format (Zhang, col. 3,

lines 6 – 10.)

15.   As to claims 3 and 18, the combination of Basu, Zhang, Hooper, and Shaw teach the

invention as claimed with respect to claim 1 above. Basu further teaches a mobile protocol

reception processing means for receiving information from the mobile network and then

informing the protocol processing means (Fig. 3, reference characters 304, 306) and a mobile

protocol transmission means for transmitting information from the protocol processing meands

and the storage unit controlling means to the mobile network via a transmission process (Fig. 3,

reference characters 310, 312.) However, the combination does not teach a transmission timing

control processing means for informing the storage unit controlling means of a transmission

timing so as to transmit the image information continuously every unit time.

16.   Zhang teaches a transmission timing control processing means for informing the storage

unit controlling means of a transmission timing so as to transmit the image information

continuously every unit time (col. 18, lines 8 – 10.)

17.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Zhang with Basu because Zhang's timing enables the

system to reduce transmission delays (Zhang, col. 4, lines 12 – 16.)

18.   As to claims 4 and 19, Basu teaches an Internet protocol reception processing means for

performing a communication process of the information received from the Internet (Basu, Fig. 5,

reference character 510) and then informing the protocol processing means; and an Internet

protocol transmission processing means for transmitting the information received from the

protocol processing means to the Internet (Basu, Fig. 5, reference character 504.)

19.   As to claims 5 and 20, the Basu teaches that said Internet interface means includes an

interface for cellulating the information to communicate communication information and the

image information when the Internet protocol reception processing means and the Internet

protocol transmission processing means communicate with the protocol processing means (Basu,

col. 10, lines 52 – 54.)

20.   As to claims 6 and 21, Zhang teaches an Internet protocol address analysis processing

means for analyzing that the information from the Internet interface means correspond to either

of communication information and image information (Zhang, col. 10, lines 6 – 9); an image

information protocol processing means for executing a protocol process of the image information

from Internet protocol address analysis processing means (Zhang, col. 10, lines 20 – 22); a data

reproduction processing means for processing the image information which are protocol-

processed by the image information protocol processing means to reproduce original information

(Zhang, col. 10, lines 27 – 30); and a communication network protocol processing means for

protocol-processing the information supplied to the Internet and the mobile network (Zhang, col.

10, lines 58 – 62.)

21.   As to claims 7 and 22, Shaw teaches a reproduced data storage unit for storing the image

information reproduced by the protocol processing means (col. 3, lines 63 – 65); a received data

managing means for managing writing/reading of reproduced data into/from the reproduced data

storage unit (col. 5, lines 33 – 36); and a reproduced data editing means for editing the

reproduced data read from the reproduced data storage unit into a format which is suitable for the

mobile terminal (col. 4, lines 1 – 5.)

22.   As to claims 8 and 23, the combination of Basu, Zhang, Hooper, and Shaw teach the

invention as claimed with respect to claims 3 and 18. The combination further teaches an

asynchronous information processing means for processing asynchronous communication

information from the protocol processing means (Basu, col. 10, lines 41 – 42); a synchronous

information processing means for processing synchronous image information from the storage

unit controlling means (Basu, col. 10, lines 42 – 44); a transmission buffer for transmitting the

information to the mobile network (Basu, col. 10, lines 66 – 67); and an information write

controlling means for controlling to write the image information from the synchronous

information processing means into the transmission buffer (Basu, col. 13, lines 37 – 39.)

However, Basu does not specifically teach that the image information processed by the

synchronous information processing means are transmitted to the mobile network prior to the

communication information so as to allow continous reproduction of the image information.

23.   Nevertheless, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the combination of Basu, Zhang, Hooper, and Shaw such that the

image information processed by the synchronous information processing means are transmitted

to the mobile network prior to the communication information so as to allow continous

reproduction of the image information because such a modification would enable the system to

reduce the likelihood of excessive and jittery delays (Zhang, col. 2, lines 60 – 67.)

24.   As to claims 9 and 24, the combination of Basu, Zhang, and Hooper teach the invention

as claimed with respect to claims 1 and 16 above. Zhang further teaches an edit data split

processing means for splitting edited information edited by the image information processing

means into cellulated information (col. 18, lines 34 – 36.) However, Zhang fails to teach a

storage unit managing means for managing reading process/writing process from/into the storage

unit; a data storage processing means for instruction the storage unit managing means of writing

of split data edited by the edit data split processing means; and a data read processing means for

instructing the storage unit managing means of reading in response to a reading timing

instruction issued from the mobile interface means.

25.   Hooper teaches a storage unit managing means for managing reading process/writing

process from/into the storage unit (col. 11, lines 35 – 38); a data storage processing means for

instruction the storage unit managing means of writing of split data edited by the edit data split

processing means (col. 11, lines 33 – 34, 38 – 40); and a data read processing means for

instructing the storage unit managing means of reading in response to a reading timing

instruction issued from the mobile interface means (col. 11, lines 45 – 48.)

26.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Hooper with Zhang for the reasons given above in

paragraph 10.

27.   As to claims 11 and 26, Basu teaches mobile interface means for establishing an interface

with a mobile network (col. 6, lines 8 – 12) wherein image information is communicated

between the mobile terminals (col. 2, lines 4 – 7, 18 – 23.) However, Basu does not teach a

protocol processing means for processing protocol of image information from the mobile

terminal; and an image information edit processing means for editing image information into

edited information suitable for mobile communication.

28.   Zhang teaches a protocol processing means for processing protocol of image information

from the mobile terminal (Fig.4, reference characters 400 – 410; col. 9, lines 60 - 63); and an

image information edit processing means for editing image information into edited information

suitable for mobile communication (col. 10, lines 31 – 40.)

29.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Basu with Zhang for the reasons given above in paragraph

7.

30.   The combination of Basu and Zhang fail to teach a storage unit for storing the image

information which is edited by the image information edit processing means and a storage unit

controlling means for controlling to store the image information in the storage unit and to read

the stored image information.

31.   Hooper teaches a storage unit for storing the image information which is edited by the

image information edit processing means (col. 12, lines 23 – 24) and a storage unit controlling

means for controlling to store the image information in the storage unit and to read the stored

image information (col. 12, lines 24 – 25.)

32.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Hooper with the combination of Basu and Zhang for the

reasons given above in paragraph 10.

33.   The combination of Zhang, Basu, and Hooper fail to teach that the image information edit

processing means edits a display characteristic of image information.

34.   Shaw teaches editing a display characteristic of image information (col. 8, lines 46 – 49.)

35.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Shaw with the combination of Zhang, Basu, and Hooper

because Shaw's editing simplifies the transfer of data from one device to another (Shaw, col. 1, lines 50 – 52.)

36.   Claims 12 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaw.

37.   As to claims 12 and 27, Shaw teaches the invention as claimed, including an image information processing means for converting plural types of image information formats, into a common image information format, which can be handled commonly (col. 3, line 60 – col. 4, line 5.) However, Shaw fails to teach that the plural types of image information formats are handled by respective terminals or that the common image information format can be handled commonly in communication with the mobile network.

38.   Nevertheless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaw to include plural image formats handled by respective terminals and common image formats handled commonly in communication with the mobile because Shaw suggests such modifications (col. 3, lines 48 – 50, 52 – 54) and because such a modification would permit mobile networks and mobile terminals to convey live video in an efficient and effective architecture (Shaw, col. 1, lines 49 – 53.)

39.   Claims 13 – 15 and 28 - 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Basu in view of Zhang, further in view of Shaw.

40.   As to claims 13 and 28, Basu teaches a mobile interface means for establishing an

interface with a mobile network in communication with a mobile network (col. 6, lines 8 – 12)

wherein image information is communicated between the mobile terminals (col. 2, lines 4 – 7, 18

– 23.) However, Basu does not teach protocol processing means for processing protocol of image

information from the mobile terminal.

41.   Zhang teaches protocol processing means for processing protocol of image information

from the mobile terminal (Fig.4, reference characters 400 – 410; col. 9, lines 60 – 63.)

42.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Basu with Zhang for the reasons given above in paragraph

7.

43.   The combination of Basu and Zhang fails to teach an image information conversion

processing means for converting the image information into a common image information

format; a storage unit for storing converted image information; a storage unit controlling means

for controlling to store the image information into the storage unit and to read stored image

information; or an image information custom processing means for editing a display

characteristic of the image information into the image information which is suitable for

respective mobile terminals.

44.   Shaw teaches an image information conversion processing means for converting the

image information into a common image information format (col. 3, lines 62 – 65); a storage unit

for storing converted image information (col. 3, line 38, 64 – 65); a storage unit controlling

means for controlling to store the image information into the storage unit and to read stored

image information (col. 7, lines 43 – 47); and an image information custom processing means for

editing a display characteristic of the image information into the image information read from the

storage unit which is suitable for respective mobile terminals (col. 3, line 65 – col. 4, line 5; col.

8, lines 46 – 49.)

45.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Shaw with the combination of Basu and Zhang because

Shaw's converstion, storage, and custom processor improves the efficiency of the apparatus

(Shaw, col. 1, lines 49 – 53.)

46.   As to claims 14 and 29, Basu teaches a mobile interface means for establishing an

interface with a mobile network in communication with a mobile network (col. 6, lines 8 – 12)

wherein image information is communicated between the mobile terminals (col. 2, lines 4 – 7, 18

– 23.) However, Basu does not teach protocol processing means for processing protocol of image

information from the mobile terminal.

47.   Zhang teaches protocol processing means for processing protocol of image information

from the mobile terminal (Fig.4, reference characters 400 – 410; col. 9, lines 60 – 63.)

48.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Basu with Zhang for the reasons given above in paragraph

7.

49.   The combination of Basu and Zhang fails to teach an image information conversion

processing means for converting the image information into a common image information

format; a storage unit for storing converted image information; a storage unit controlling means

for controlling to store the image information into the storage unit and to read stored image

information; or an image information custom processing means for editing the image information

into the image information which is suitable for respective mobile terminals, wherein the image

information read from the storage unit is supplied constantly to the mobile network to deliver

broadcast.

50.   Shaw teaches an image information conversion processing means for converting the

image information into a common image information format (col. 3, lines 62 – 65); a storage unit

for storing converted image information (col. 3, line 38, 64 – 65); a storage unit controlling

means for controlling to store the image information into the storage unit and to read stored

image information (col. 7, lines 43 – 47); and an image information custom processing means for

editing a display characteristic of the image information into the image information read from the

storage unit which is suitable for respective mobile terminals (col. 3, line 65 – col. 4, line 5; col.

8, lines 46 – 49), wherein the image information read from the storage unit is supplied constantly

to the mobile network to deliver broadcast (col. 4, lines 36 – 39.)

51.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Shaw with the combination of Basu and Zhang because

Shaw's converstion, storage, and custom processor improves the efficiency of the apparatus

(Shaw, col. 1, lines 49 – 53.)

52.   As to claims 15 and 30, Basu teaches an Internet interface means for establishing an

interface with the Internet (col. 3, lines 32 – 35.) However, Basu does not teach protocol

processing means for processing protocol of image information from the mobile terminal.

53.   Zhang teaches protocol processing means for processing protocol of image information

from the mobile terminal (Fig.4, reference characters 400 – 410; col. 9, lines 60 – 63.)

54.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Basu with Zhang for the reasons given above in paragraph

7.

55.   The combination of Basu and Zhang fails to teach an image information conversion

processing means for converting the image information into a common image information

format; a storage unit for storing converted image information; a storage unit controlling means

for controlling to store the image information into the storage unit and to read stored image

information; or an image information custom processing means for editing and processing a

display characteristic of the image information read by the storage unit controlling means to meet

a mobile communication.

56.   Shaw teaches an image information conversion processing means for converting the

image information into a common image information format (col. 3, lines 62 – 65); a storage unit

for storing converted image information (col. 3, line 38, 64 – 65); a storage unit controlling

means for controlling to store the image information into the storage unit and to read stored

image information (col. 7, lines 43 – 47); and an image information custom processing means for

editing and processing the image information read by the storage unit controlling means to meet

a communication (col. 3, line 65 – col. 4, line 5; col. 8, lines 46 – 49.)

57.   It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine the teachings of Shaw with the combination of Basu and Zhang because

Shaw's converstion, storage, and custom processor improves the efficiency of the apparatus

(Shaw, col. 1, lines 49 – 53.)

Response to Arguments

58.   The Examiner notes an apparent typographical error in the applicant's remarks filed with

Paper No. 5: the Basu reference (U.S. Patent No. 6,097,733) was erroneously referred to as

"Bascu".

59.   Applicant's arguments filed December 9, 2002 have been fully considered but they are

not persuasive.

60.   Applicant's arguments with respect to claims 1 – 9, 11, 13 – 24, 26, and 28 - 30 have been

considered but are moot in view of the new ground(s) of rejection.

61.   With respect to applicant's remaining remarks, applicants argued in substance that (a) the

term "display characteristic" refers to image size or color depth as disclosed on page 5, line 25 –

page 6, line 9 of the specification as originally filed (paragraph 13 of the substitute

specification), and the references fail to teach changing color depth or image size; and (b) Shaw

does not teach or suggest "image information formats, which are handled by respective mobile

terminals" or "a common image format, which can be handled commonly in communication with

the mobile network".

62.   The Examiner respectfully traverses applicant's remarks. As to point (a), in response to

applicant's argument that the references fail to show certain features of applicant's invention, it is

noted that the features upon which applicant relies (i.e., color depth or image size) are not recited

in the rejected claim(s). Although the claims are interpreted in light of the specification,

limitations from the specification are not read into the claims. See *In re Van Geuns*, 988

F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The Examiner also notes that nowhere in the cited

paragraph does the specification use or define the term "display characteristic".

63.   As to point (b), Shaw teaches "image information formats, which are handled by

respective mobile terminals" and "a common image information format" as discussed in

paragraph 37 above. Although Shaw does not explicitly teach that the common image

information format "can be handled commonly in communication with the mobile network" such

a modification would have been obvious to one of ordinary skill in the art, as discussed in

paragraph 38 above.

Conclusion

64.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

65.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Gregory L. Clinton whose telephone number is 703-305-3179.

The examiner can normally be reached on Monday - Thursday 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai T. An can be reached on 703-305-9678. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-746-7239 for regular

communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-305-3900.

Gregory Clinton
February 21, 2003

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